

AMENDMENTS TO THE CLAIMS

Please amend the claims as shown directly below. This listing of claims will replace all prior versions, and listings, of claims in the application

1.-20. (Cancelled)

21. (Original) A proppant composition comprising a particulate material associated with a tracking composition, wherein the tracking composition comprises a substantially non-radioactive tracking material selected from the group consisting of water soluble inorganic salts, water soluble organic salts, metals, metal salts of organic acids, metal oxides, metal sulfates, metal phosphates, metal carbonates, metal salts, phosphorescent pigments, fluorescent pigments, photoluminescent pigments, oil soluble dyes, oil dispersible dyes and oil dispersible pigments.

22. (Original) A proppant composition according to claim 21, wherein the tracking material comprises a metal selected from Groups I to VIII of the Periodic Table of the elements and the lanthanide series of rare earth metals;

provided that the metal is not a component of the particulate material; and

provided that the metal is compatible with the fluids disposed within the well bore.

23. (Original) A proppant composition according to claim 21, wherein the tracking material is selected from the group consisting of metals, metal oxides, metal phosphates, metal sulfates, metal carbonates, metal salts, and derivatives thereof, and wherein the metal or metal portion is selected from the group consisting of gold, silver, copper, aluminum, barium, beryllium, cadmium, cobalt, chromium, iron, lithium, magnesium, manganese, molybdenum, nickel, phosphorus, lead, titanium, vanadium, and zinc.

24. (Original) A proppant composition according to claim 23, wherein the tracking material comprises a metal selected from the group consisting of copper, nickel, zinc, cadmium, magnesium and barium.

25. (Original) A proppant composition according to claim 23, wherein the tracking material comprises a metal oxide selected from the group consisting of manganese oxide, cuprous oxide, zinc oxide, magnesium oxide, and barium oxide.

26. (Original) A proppant composition according to claim 23, wherein the tracking material is selected from the group consisting of metal salts, metal oxides, metal sulfates, metal phosphates and metal salts of organic acids and the metal portion is selected from the group consisting of chromium, molybdenum, tungsten, manganese, technetium, rhenium, lanthanum, cerium, praseodymium, neodymium, promethium, samarium, europium, gadolinium, terbium, dysprosium, holmium, erbium, thulium, ytterbium and lutetium.

27. (Original) A proppant composition according to claim 26, wherein the tracking material comprises a metal salt of an organic acid and the organic acid is selected from the group consisting of substituted and unsubstituted alkanoic carboxylic acids, alkenoic carboxylic acids, polyunsaturated aliphatic monocarboxylic acids and aromatic carboxylic acids.

28. (Original) A proppant composition according to claim 21, wherein the tracking material is selected from the group consisting of phosphorescent pigments, fluorescent pigments and photoluminescent pigments and wherein the phosphorescent, fluorescent, and photoluminescent pigments are prepared from materials selected from the group consisting of alkaline earth aluminates activated by rare earth ions, zinc sulfide phosphors, aluminate phosphors, zinc silicate phosphors, zinc sulfide cadmium phosphors, strontium sulfide phosphors, calcium tungstate phosphors and calcium sulfide phosphors.

29. (New) A proppant composition according to claim 21, wherein the particulate material is selected from the group consisting of fibrous materials, tackifying agents, and deformable beads.

30. (New) A proppant composition according to claim 21, further comprising a tracking material-resin mixture formed by blending the tracking material with a resin, wherein proppant in the proppant composition is coated with the tracking material-resin mixture.

31. (New) A proppant composition according to claim 21, further comprising a particulate material tagged with the tracking material.
32. (New) A proppant composition according to claim 27, wherein the organic acid comprises an alkanoic carboxylic acid having from 5 to 35 carbon atoms.
33. (New) A proppant composition according to claim 27, wherein the organic acid comprises an alkenoic carboxylic acid having from 5 to 30 carbon atoms.
34. (New) A proppant composition according to claim 27, wherein the organic acid comprises a polyunsaturated aliphatic monocarboxylic acid selected from the group consisting of sorbic acid, linoleic acid, linolenic acid, and eleostearic acid.
35. (New) A proppant composition according to claim 27, wherein the organic acid comprises an aromatic acid selected from the group consisting of benzoic acid, salicylic acid, cinnamic acid, and gallic acid.